

WHAT IS CLAIMED IS:

1. An inkjet recording element comprising a permeable microvoided layer comprising a polylactic-acid-based material, in a continuous phase, and interconnecting voids.
2. The recording element of claim 1 wherein the microvoided layer has an ink absorbency rate resulting in a dry time of less than about 10 seconds.
3. The recording element of claim 1 wherein the microvoided layer has a total calculated absorbent capacity of at least about 14 cc/m².
4. The recording element of claim 1 wherein the voids contain void initiating particles.
5. The recording element of claim 4 wherein the particles having a particle size of from about 5 nm to about 15 μ m.
6. The recording element of claim 1 wherein the microvoided layer is a biaxially oriented polylactic-acid-containing material.
7. The recording element of claim 1 wherein the microvoided layer has a dry thickness of from about 25 to about 400 μ m.
8. The recording element of claim 1 wherein the polylactic-acid-based material is composed of at least 75% by weight of poly(L-lactic acid).

9. The recording element of claim 4 wherein the particles are inorganic and have an average particle size of from about 0.1 to about 10 μm and make up from about 45 to about 75 weight % of the total weight of the microvoided layer.

10. The recording element of claim 4 wherein the particles are organic and have an average particle size of from about 0.3 to about 2 μm and comprise from about 45 to about 75 weight % of the total weight of the microvoided layer.

11. The recording element of claim 1 wherein the polylactic-acid-based material comprises a mixture of at least 90% poly(L-lactic acid) and at least 1% poly(D-lactic acid).

12. The recording element of claim 9 wherein the inorganic particles are present in an amount between 50 to 65 weight %.

13. The recording element of claim 9 wherein the inorganic particles are selected from the group consisting of barium sulfate, calcium carbonate, zinc sulfide, zinc oxide, titanium dioxide, silica, alumina, and combinations thereof.

14. The recording element of claim 9 wherein said inorganic particles have an average size from 0.3 to 2.0 μm .

15. The recording element of claim 1 wherein the microvoided layer is an uppermost ink-receiving layer.

16. The recording element of claim 1 wherein the microvoided layer is a support or component thereof.

17. The recording element of claim 1 wherein the microvoided layer is between a support and an ink-receiving layer.

18. The recording element of claim 17 wherein the microvoided layer is in a multilayer support and is adjacent to a second support layer.

19. The recording element of claim 18 wherein the second support layer comprises a voided or non-voided polylactic-acid-based material which the second support layer is adjacent to and integral with the microvoided layer.

20. The recording element of claim 18 wherein the second support layer comprises paper or resin-coated paper.

21. The recording element of claim 1 wherein said continuous phase comprises additional polymers or blends of other polyesters.

22. An inkjet recording element comprising a porous image-receiving layer over a support, wherein the support and/or a substrate between the support and the image-receiving layer comprises a permeable microvoided layer comprising a polylactic-acid-based material, in a continuous phase, wherein both the image-receiving layer and the microvoided layer comprise interconnecting voids.

23. The recording element of claim 22 wherein the microvoided layer has an ink absorbency rate resulting in a dry time of less than about 10 seconds.

24. The recording element of claim 22 wherein the microvoided layer has a total calculated absorbent capacity of at least about 14 cc/m².

25. The recording element of claim 22 wherein the porous image-receiving layer having interconnecting voids comprises particles dispersed in a polymeric binder.

26. The recording element of claim 25 wherein the particles are inorganic.

27. The recording element of claim 26 wherein the inorganic particles comprise silica, alumina, zirconia, titania, calcium carbonate or barium sulfate.

28. The recording element of claim 25 wherein the particles are organic.

29. The recording element of claim 25 wherein the polymeric binder comprises a hydrophilic binder.

30. The recording element of Claim 29 wherein the hydrophilic binder comprises poly(vinyl alcohol), poly(vinyl acetate), poly(vinyl pyrrolidone), gelatin, poly(2-ethyl-2-oxazoline), poly(2-methyl-2-oxazoline), poly(acrylamide), chitosan, poly(ethylene oxide), methyl cellulose, ethyl cellulose, hydroxyethyl cellulose, or hydroxypropyl cellulose.

31. The recording element of Claim 25 wherein said polymeric binder comprises a hydrophobic binder.

32. The recording element of claim 31 wherein said hydrophobic binder comprises poly(styrene-co-butadiene), a polyurethane latex, a polyester latex, poly(n-butyl acrylate), poly(n-butyl methacrylate), poly(2-ethylhexyl acrylate), a copolymer of n-butylacrylate and ethylacrylate or a copolymer of vinylacetate and n-butylacrylate.

33. The recording element of claim 25 wherein the volume ratio of the particles to said binder is from about 1:1 to about 15:1.

34. The recording element of claim 22 wherein the support further comprises paper laminated to a side of the microvoided layer which does not have thereon said image-receiving layer.

35. An inkjet recording element comprising a porous image-receiving layer over a monolayer support, the monolayer comprising a permeable microvoided layer in which a continuous phase comprises a polylactic-acid-based material having interconnecting voids.

36. An inkjet printing process, comprising the steps of:

- A) providing an inkjet printer that is responsive to digital data signals;
- B) loading the printer with an inkjet recording element as described in claim 1;
- C) loading the printer with an inkjet ink composition; and
- D) printing on the inkjet recording element using the inkjet ink in response to the digital data signals.

37. The inkjet printing process of claim 36 wherein the permeable microvoided layer was extruded as a monolayer film.

38. The inkjet printing process of claim 36 wherein the permeable microvoided layer was stretched at a temperature of under 75°C.